

## ABSTRACT OF THE DISCLOSURE

A digitally-controlled pyroelectric signal sampling circuit is proposed, which is designed to process the alternating current (AC) signal from a pyroelectric device, such as a pyroelectric infrared sensor, such that the AC signal is converted into direct current (DC) signal. The proposed digitally-controlled pyroelectric signal sampling circuit is characterized by the use of a microprocessor in conjunction with a crystal oscillator whose operating characteristics would be substantially unaffected by temperature changes in the ambient environment. This feature allows the generated trigger signal and sampling signals to be substantially fixed in frequencies and timings, without drifting due to temperature changes in the ambient environment, and therefore allows the digitally-controlled pyroelectric signal sampling circuit of the invention to provide a more accurate DC output than prior art. Moreover, the utilization of a microprocessor in place of analog-type delay circuitry can help simplify the hardware architecture and thus save manufacturing cost.

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